



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

October 11, 2022

Ex. 6 PP / Ex. 7(C)

SENT VIA USPS TRACKING

1028 The Dalles Ave
Sunnyvale, CA 94087

**Re: Vapor Intrusion Investigation Findings
Recommendation for Mitigation**

Ex. 6 PP / Ex. 7(C) (RES107/113), Sunnyvale, CA 94085

**Philips, Advanced Micro Devices 901-902, TRW Microwave Superfund Sites ("Triple Site")
CERCLIS ID# CAD070466479)**

Dear **Ex. 6 PP / Ex. 7(C)**

This letter is to inform you about the vapor intrusion investigations performed at your property **Ex. 6 PP / Ex. 7(C)** in Sunnyvale, California under direction from the U.S. Environmental Protection Agency (EPA). Please refer to the attached fact sheet and below for more information on this EPA investigation. Furthermore, based on the air sampling results performed at **Ex. 6 PP / Ex. 7(C)**, EPA recommends the installation of a vapor intrusion mitigation system for the building.

Please keep these documents for your personal records. These documents should be disclosed as part of any future property transactions.

Background on EPA Investigation

The RES107/113 property at **Ex. 6 PP / Ex. 7(C)** is located within the Environmental Protection Agency (EPA) Triple Site Offsite Operable Unit (OOU) Superfund Site (<http://epa.gov/superfund/TripleSite>). The Triple Site was established to clean up groundwater containing volatile organic compounds such as trichloroethylene (TCE). TCE is used in various industries and products such as a degreaser, and as an ingredient in glues, paint removers, spot removers, and some cleaners. TCE can cause harmful health effects if present at high enough levels. Historically, about 0.5 miles away TCE was used at the former Signetics, Advanced Micro Devices Inc., and TRW Microwave sites (collectively referred to as the Triple Site) to fabricate silicon chips. The electronics manufacturing operations stopped in the 1960s-1980s, and the parties responsible for the environmental cleanup have been conducting activities to contain and clean up TCE in the shallow groundwater. This cleanup process continues today and will be ongoing for many more years. Based on results from testing done at homes in the San Miguel neighborhood, TCE in groundwater is volatilizing and has migrated into some neighborhood homes through a process called vapor intrusion.

After requesting permission from property owners and tenants, EPA conducted several rounds of sampling in buildings and homes in the neighborhood. Since 2015, EPA sampled over 225 homes/units and more than 30 buildings at the neighborhood schools. Several school buildings and homes in the San Miguel neighborhood showed some evidence of vapor intrusion, primarily in crawlspaces. EPA has overseen the design and installation of over 20 mitigation systems in the neighborhood.

We have attached to this letter EPA's most recent (April 2016) fact sheet that explains the Triple Site investigation in more detail. Please note that drinking water does not come from groundwater in this neighborhood. Neighborhood water for drinking, bathing, and watering gardens comes from sources such as the Hetch Hetchy Reservoir in the Sierra Nevada Mountains and meets all state and federal drinking water standards.

Your Sampling Results: Indoor air sampling was performed at **Ex. 6 PP / Ex. 7(C)** in October 2015, November 2015, January 2017, and February 2019 during the winter heating season when vapor intrusion is more likely to occur.

The sample results from your property meet EPA's health protective action level. Indoor air sampling results from your building meet EPA's short-term health protective Action Level for TCE ($2 \mu\text{g}/\text{m}^3$). However, the results do not meet EPA's long-term (26-year) health protective Screening Level for TCE ($0.48 \mu\text{g}/\text{m}^3$). These results are presented in the attached Table 1.

TCE Vapor Intrusion Findings: Your sampling results meet EPA's requirements for being protective of human health. However, based on these indoor air results and information collected from other properties in your neighborhood, there is still potential for unacceptable vapor intrusion issues at your property. Therefore, out of an abundance of caution, EPA recommends installation of a vapor intrusion mitigation system for your home.

Offer of Mitigation System

A generic vapor intrusion mitigation system design for your review is attached to this letter. There is no cost to you for installing or maintaining the mitigation system. Over 20 similar mitigation systems have already been designed and installed in other homes and school buildings nearby to address elevated levels of TCE. If you express an interest to proceed, Locus Technologies (Locus), a private environmental consulting firm experienced in vapor intrusion issues, will prepare a more detailed mitigation plan for your review.

The purpose of a vapor intrusion mitigation system is to draw ground vapors from underneath the building and route that air to a plastic vent stack. The vent stack transfers ground vapors directly to the outdoor air where they immediately dilute and are broken down by sunlight. Active vapor intrusion mitigation systems use an electric-powered fan on the vent stack to generate suction while passive systems rely on convection and do not require electrical power to generate suction.

Health Protection Goals

EPA's goal for Superfund site-related chemicals is to keep exposures as low as reasonably possible. EPA considers the safe range of TCE concentrations for residents to be below $2.0 \mu\text{g}/\text{m}^3$ (the short-term screening level). When an indoor air sample is collected and shows a concentration above the long-term screening level ($0.48 \mu\text{g}/\text{m}^3$) but below $2.0 \mu\text{g}/\text{m}^3$, EPA uses this information to decide whether additional sampling or response activities are necessary to confirm that levels continue to

remain protective over time. More information about TCE can be found at this website:
<http://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=172&tid=30>

Your Response is Requested

Please reach out to Mr. J. Wesley Hawthorne, Locus Technologies, at hawthornej@locustec.com regarding the vapor intrusion mitigation system. He can also answer any questions you may have.

Access Agreement

As the property owner your written permission is required before any sampling and mitigation activities can take place. Please return a signed copy of the enclosed Access Agreement form, using the pre-addressed, stamped return envelope. Alternatively, a scanned signed copy can be accepted at hawthornej@locustec.com.

Please feel free to contact me anytime at abreu.lilian@epa.gov or 415-972-3010 if you have any questions or comments. You may also contact EPA's Community Involvement Coordinator, Angie Fuoco, at (415) 947-4267 or by e-mail to fuoco.angie@epa.gov.

Thank you again for your cooperation and participation in this vapor intrusion investigation.

Sincerely, **LILIAN
ABREU**

Lilian Abreu, PhD
Remedial Project Manager
Superfund and Emergency Management Division

Digitally signed by LILIAN
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Enclosures:

Table 1. Air Sampling Analytical Results for RES166/215
Vapor intrusion mitigation system generic design diagram
Access agreement and pre-addressed stamped return envelope
Most recent EPA fact sheet of the Triple Site vapor intrusion investigation (April 2016)

cc: J. Wesley Hawthorne, Locus Technologies (via email)
Nancy-Jeanne LeFevre, Locus Technologies (via email)
Alan Tuan, Locus Technologies (via email)
Cynthia Woo, APTIM (via email)